

ROOF PLAN / SITE PLAN
SCALE:

GENERAL NOTES

SOLAR PHOTOVOLTAIC SYSTEM TO BE INSTALLED ON RESIDENTIAL STRUCTURE.

DESIGN COMPLYING WITH THE LATEST EDITION OF CALIFORNIA ELECTRICAL CODE, NEC, THE SAN DIEGO AREA ELECTRICAL NEWS LETTERS AND ALL LOCAL ORDINANCES AND POLICIES.

THIS PROJECT HAS BEEN DESIGNED IN COMPLIANCE WITH THE CBC SECTION 1609 TO WITHSTAND A MINIMUM 85 MPH WIND LOAD.

THE HOUSE IS STORY(IES) TALL.

THE RAFTERS ARE x AND INCHES ON CENTER.

THIS SYSTEM WILL NOT BE INTERCONNECTED UNTIL APPROVAL FROM THE LOCAL JURISDICTION AND THE UTILITY IS OBTAINED.

THIS SYSTEM IS AN UTILITY INTERACTIVE SYSTEM WITH NO STORAGE BATTERIES.

THE SOLAR PHOTO VOLTAIC INSTALLATION SHALL NOT OBSTRUCT ANY PLUMBING, MECHANICAL OR BUILDING ROOF VENTS.

IF THE EXISTING MAIN SERVICE PANEL DOES NOT HAVE VERIFIABLE GROUNDING ELECTRODE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL A SUPPLEMENTAL GROUNDING ELECTRODE.

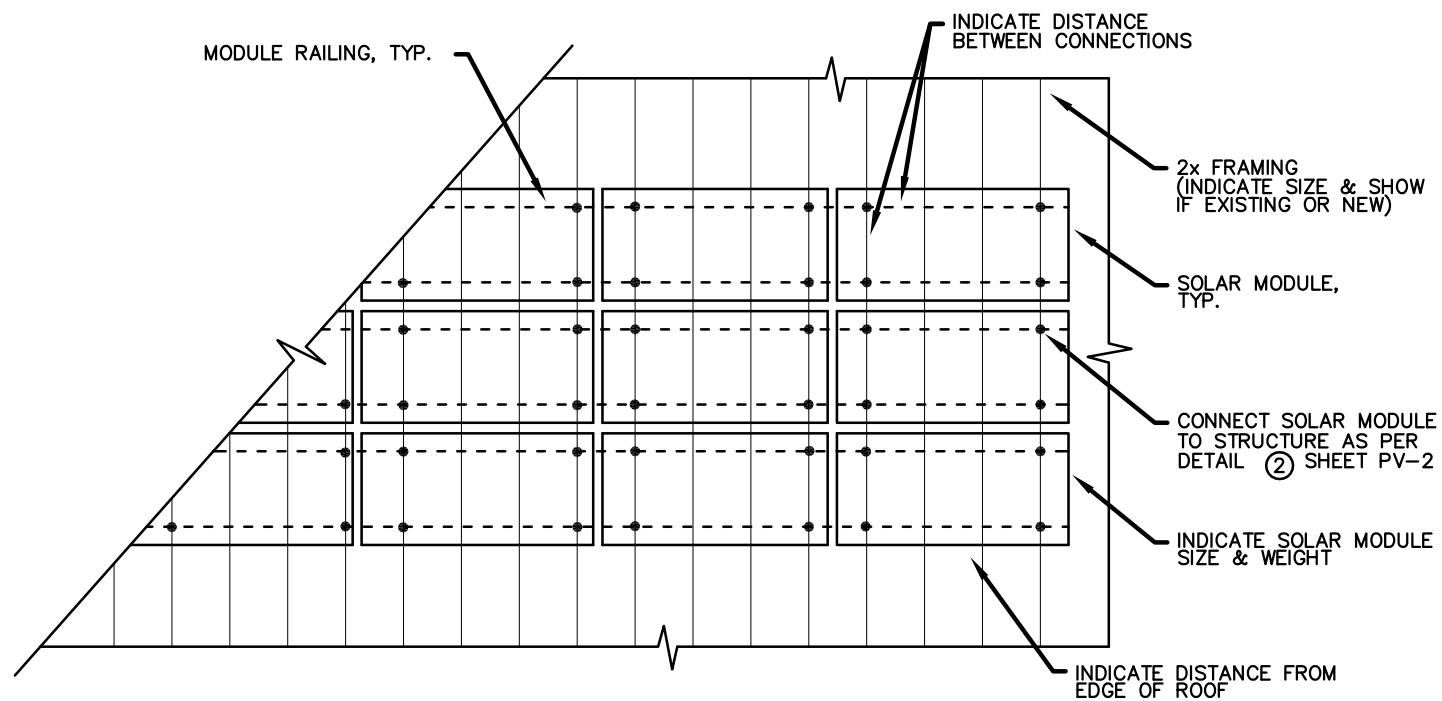
EACH MODULE WILL BE GROUNDED USING THE SUPPLIED CONNECTIONS POINTS IDENTIFIED ON THE MODULE AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

A LADDER SHALL BE IN PLACE FOR INSPECTION IN COMPLIANCE WITH CAL-OSHA REGULATIONS.

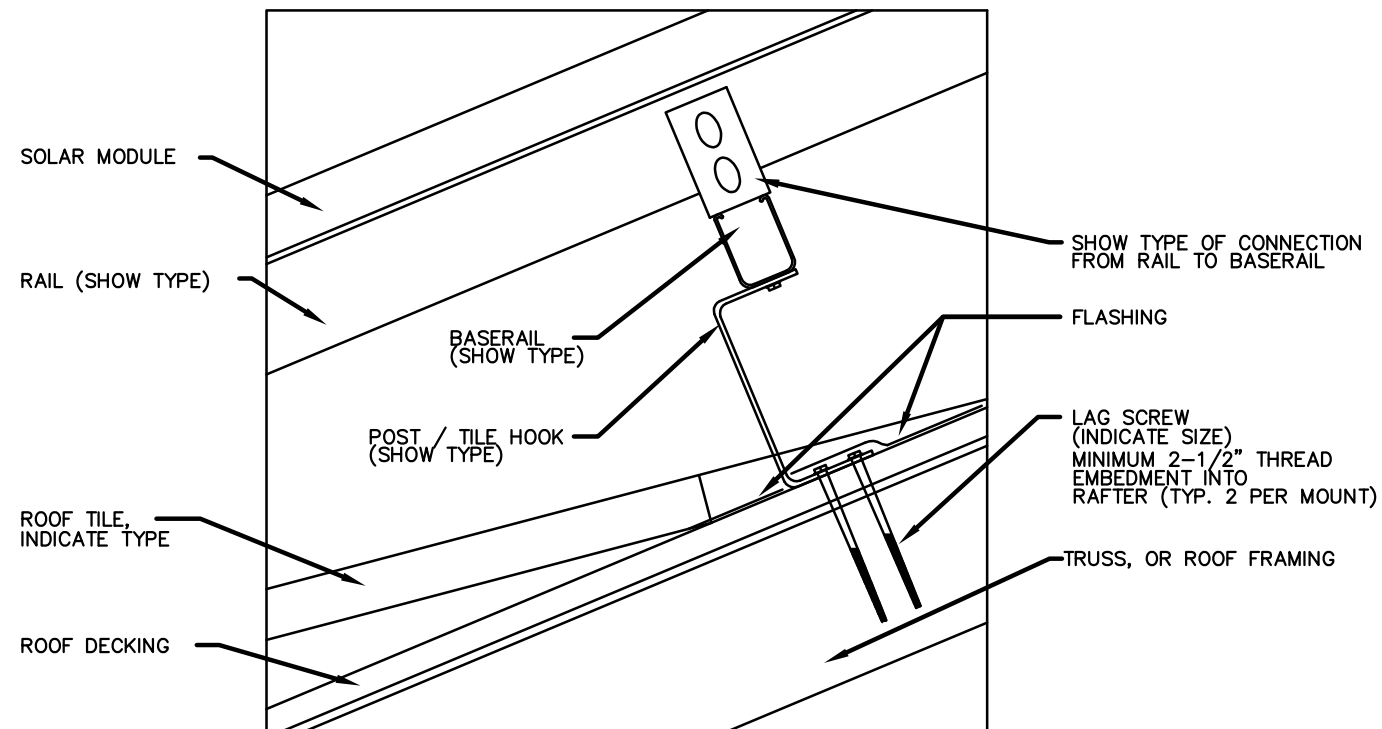
PROPER ACCESS AND WORKING CLEARANCE WILL BE PROVIDED AS PER SECTION 110.26 CEC.

NOTE:
ALL ITALIC FONTS SHALL BE MODIFIED TO REFLECT ACTUAL PROJECT SPECIFIC DETAILS.

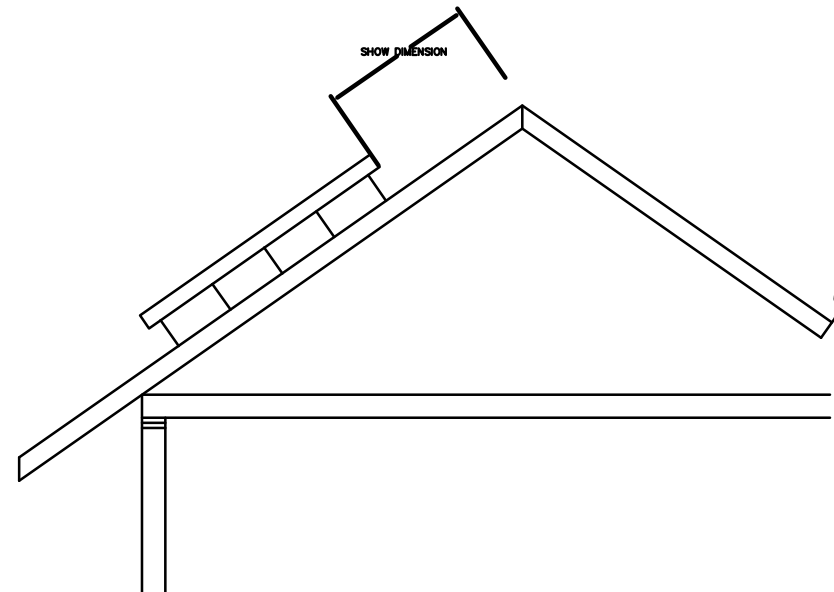
COMPANY LOGO	
SIGNATURE & LICENSE NUMBER	
KW RATING OF THE SYSTEM	
PROJECT NAME PROJECT ADDRESS LEGAL DESCRIPTION / ASSESSOR'S PARCEL NUMBER	
REVISION	DATE
DRAWN BY:	
PROJECT NO.	
DATE:	
SHEET	
PV-1	



ENLARGED PARTIAL ROOF PLAN DETAIL ①
NTS



SOLAR MODULE MOUNTING DETAIL DETAIL ②
NTS



ELEVATION
NTS

- NOTE:**
1. THIS IS ONLY A SAMPLE FOR THE MOUNTING. SHOW EXACT MOUNTING DETAIL AS APPLIES TO YOUR PROJECT.
 2. ALL ITALIC FONTS SHALL BE MODIFIED TO REFLECT ACTUAL PROJECT SPECIFIC DETAILS.

COMPANY LOGO

SIGNATURE &
LICENSE NUMBER

KW RATING OF
THE SYSTEM

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PROJECT ADDRESS
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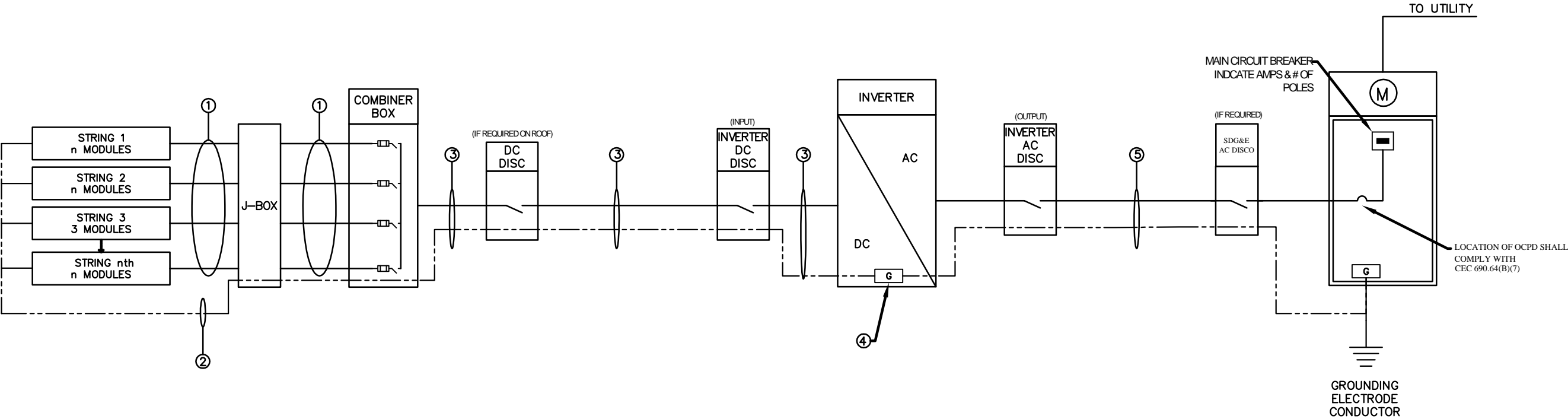
REVISION	DATE

DRAWN BY:
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PV-2

REFER TO SAN DIEGO BULLITEN 301 FOR
MORE INFORMATION

INDICATE IF NEW OR EXISTING MAIN
SERVICE UPGRADED TO ---A, 240/120V



SINGLE LINE DIAGRAM
NTS

General Notes

1. ALL PLAQUES AND SIGNAGE REQUIRED BY THE LATEST EDITION OF CALIFORNIA ELECTRICAL CODE AND THE SAN DIEGO AREA ELECTRICAL NEWSLETTER, WILL BE INSTALLED AS REQUIRED.

2. ALTERNATE POWER SOURCE PLACARD SHALL BE METALLIC OR PLASTIC, ENGRAVED OR MACHINE PRINTED LETTERS IN A CONTRASTING COLOR TO THE PLAQUE. THIS PLAQUE WILL BE ATTACHED BY POP RIVETS OR SCREWS OR OTHER APPROVED METHOD. IF EXPOSED TO SUNLIGHT, IT SHALL BE UV RESISTANCE.

3. PHOTOVOLTAIC DC CONDUCTORS ENTERING THE BUILDING SHALL BE INSTALLED IN METAL CONDUIT AND THE CONDUIT SHALL BE LABELED, "CAUTION DC CIRCUIT" OR EQUIVALENT EVERY 10 FT."

4. EXPOSED NON-CURRENT CARRYING METAL PARTS OF MODULE FRAMES, EQUIPMENTS, AND CONDUCTOR ENCLOSURES SHALL BE GROUNDED IN ACCORDANCE WITH 250.134 OR 250.136 (A) REGARDLESS OF VOLTAGE.

5. EACH MODULE SHALL BE GROUNDED USING THE SUPPLIED CONNECTION POINT IDENTIFIED ON THE MODULE AND THE MANUFACTURER'S INSTRUCTIONS.

6. IF THE EXISTING GROUNDING ELECTRODE SYSTEM CAN NOT BE VERIFIED OR IS ONLY METALIC WATER PIPING, IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL A SUPPLEMENTAL GROUNDING ELECTRODE. THE INVERTER SHALL BE LISTED AS A UTILITY INTERACTIVE UNIT INSTALLED ON THE SAME BUILDING AS THE MODULES BUT NOT ON THE ROOF.

7. THE INVERTER OUTPUT CIRCUIT CONDUCTORS SHALL TERMINATE WITHIN THE SERVICE PANEL IN ACCORDANCE WITH CEC 690.64(B)(7).

10. BACKFEED BREAKERS IN THE SERVICE PANEL SHALL BE SUITABLE AS SUCH.
11. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S APPROVED INSTALLATION INSTRUCTIONS. A COPY OF THESE INSTRUCTIONS ARE INCLUDED AS PART OF THIS PLAN.

12. ALL EQUIPMENT AND WIRING SHALL BE LISTED BY NATIONAL RECOGNIZED TESTING AGENCY

13. USE MINIMUM 8 AWG EQUIPMENT GROUNDING CONDUCTOR (EGC) WHEN IT IS SUBJECT TO PHYSICAL DAMAGE, OR INSTALL THE EGC IN AN APPROVED RACEWAY.

14. ALL WIRING SHALL BE OF COPPER MATERIAL, AND **KEPT OUTSIDE OF THE BUILDING.**

15. ALL ELECTRICAL EQUIPMENT INCLUDING THE SERVICE SHALL HAVE A LEGIBLE, VISIBLE, AND DURABLE MARKING INDICATING THE MANUFACTURER NAME, CURRENT, VOLTAGE, FREQUENCY, AND NUMBER OF PHASES.

16. EACH INSTALLED EQUIPMENT, WIRING AND OVERCURRENT PROTECTIVE DEVICE (OCPD) SHALL HAVE A SHORT CIRCUIT RATING NOT LESS THAN THE AVAILABLE SHORT CIRCUIT CURRENT AT THEIR INPUT TERMINALS.

17. THE INVERTER SHALL COMPLY ACCORDANCE WITH CEC 690.11.

Specific Notes

1. IDENTIFY # OF WIRES, GAGE, WIRE INSULATION TYPE, CONDUIT TYPE & SIZE USE-2 (SINGLE CONDUCTORS IN AIR) AND/OR THWN-2 OR XHHW-2 OR RHW-2

2. EQUIPMENT GROUND COND.(EGC) PER 690.45(A)

3. WIRE TYPE : THWN-2 OR XHHW-2 OR RHW-2

4. DC EGC PER 690.45(A)

5. DC- AC BONDING JUMPER PER 690.47(C)(3) & 250.122 WIRE TYPE: THWN-2 OR XHHW-2 OR RHW-2

6. DC GEC AND AC EGC PER 690.47(C)(3) & 250.122

SHOW THE VALUES FOR THE SYSTEM SPECIFIC ELECTRICAL CHARACTERISTICS (ARTICLE 690.53):

1. OPERATING CURRENT
2. OPERATING VOLTAGE
3. MAXIMUM SYSTEM VOLTAGE
4. SHORT-CIRCUIT CURRENT

SHOW THE FOLLOWING INFORMTION FOR THE PROJECT:

1. (#) OF STRINGS
2. (#) OF MODULES IN EACH STRING
3. MANUFACTURER'S NAME AND THE MODEL NUMBER OF MODULES
4. MANUFACTURER'S NAME AND THE MODEL NUMBER OF THE INVERTER(S)
5. SERVICE BUS AMPERE RATING
6. MAIN BREAKER AMPERE RATING
7. PV BACK-FED BREAKER AMPERE RATING

COMPANY LOGO

SIGNATURE &
LICENSE NUMBER
&
CLASSIFICATION
C-10 OR C-46

KW RATING OF
THE SYSTEM

PROJECT NAME
PROJECT ADDRESS
LEGAL DESCRIPTION / ASSESSOR'S PARCEL NUMBER

REVISION	DATE

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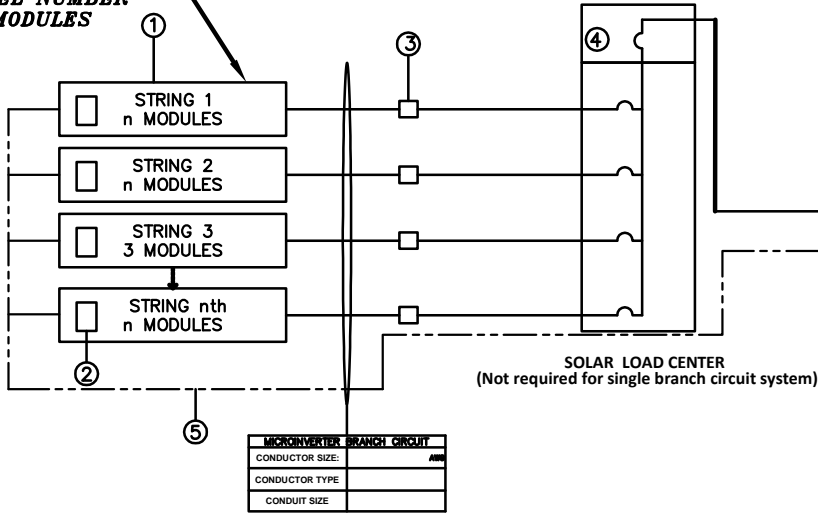
PV-3

REFER TO SAN DIEGO BULLITEN 301 FOR MORE INFORMATION

1	SOLAR PV MODULE
2	MICROINVERTER
3	JUNCTION BOX FOR THE MANUFACTURER SUPPLIED CABLE TO RACEWAY TRANSITION
4	SOLAR LOAD CENTER
5	ARRAY EQUIPMENT GROUNDING CONDUCTOR
6	MICROINVERTER GROUNDING ELECTRODE CONDUCTOR (MIN #8 AWG COPPER)
7	PERFORMANCE METER
8	SAFETY DISCONNECT SWITCH
9	ELECTRICAL MAIN SERVICE PANEL

INDICATE IF NEW OR EXISTING MAIN SERVICE UPGRADED TO---A, 240/120V

MANUFACTURER'S NAME AND THE MODEL NUMBER OF MODULES



SINGLE LINE DIAGRAM
NTS

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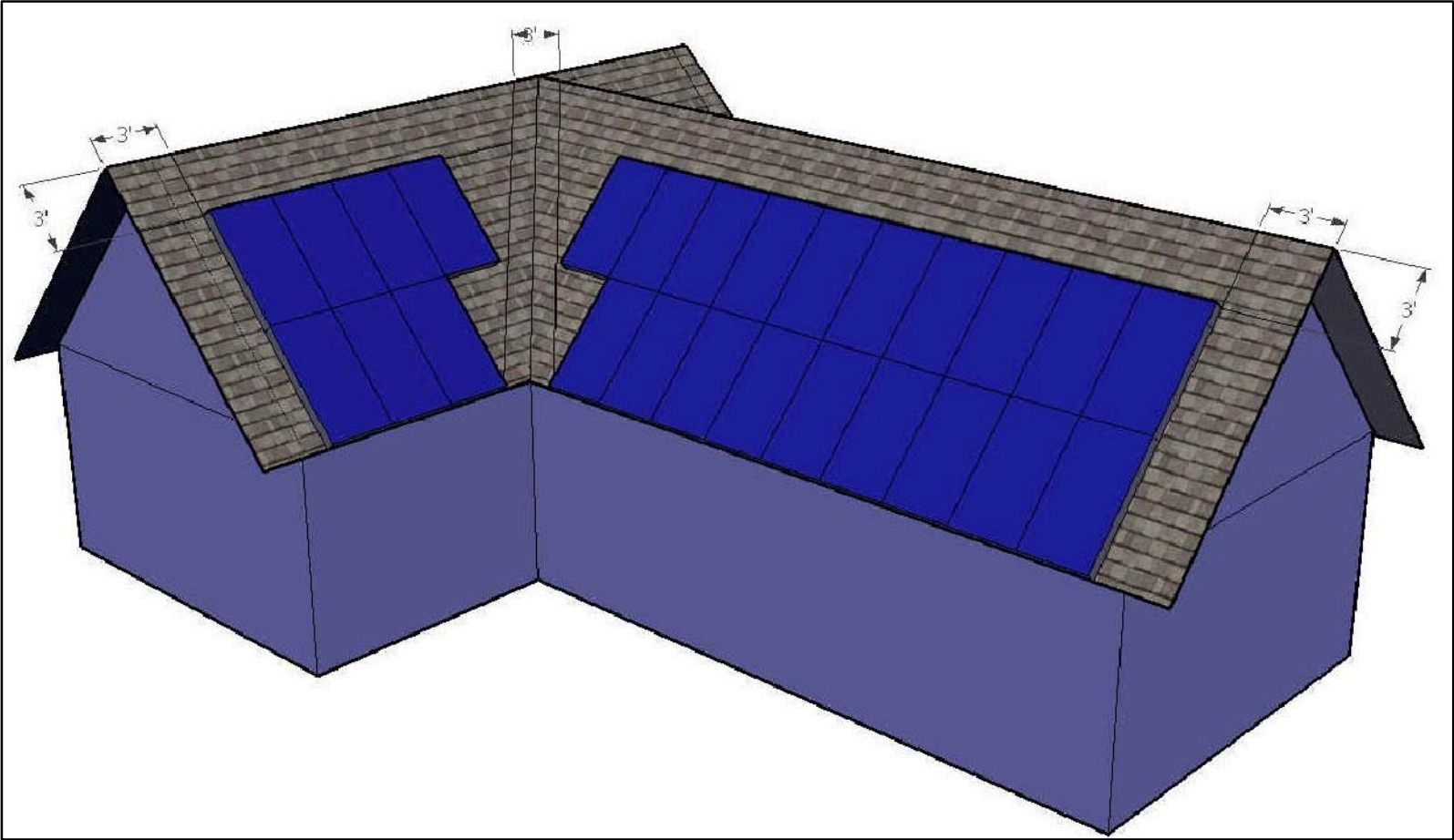
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PV-3	

<p>ROOF ACCESS-RESIDENTIAL HIP ROOF LAYOUTS (CFC 605.11.3.2.1)</p> <ul style="list-style-type: none">SINGLE HIP NEEDS ONE 3' PATHWAY ON ARRAY FACES. PATHWAY SHOULD BE ALONG A STRUCTURALLY STRONG LOCATION SUCH AS A LOAD BEARING WALL.CFC ADDS A STATEMENT THAT LADDER LOCATIONS CANNOT BE IN FRONT OF WINDOWS OR DOORS AND CANNOT CONFLICT WITH TREE LIMBS, WIRES, OR SIGNS.	<p>ROOF ACCESS-RESIDENTIAL WITH SINGLE RIDGE (CFC 605.11.3.2.2)</p> <ul style="list-style-type: none">SINGLE RIDGE NEEDS TWO 3' PATHWAYS ON ARRAY FACES ALONG EDGE OF LOAD BEARING EXTERIOR WALL.	<p>ROOF ACCESS-RESIDENTIAL HIPS AND VALLEYS (CFC 605.11.3.2.3)</p> <ul style="list-style-type: none">1.5' SPACE ON EITHER SIDE OF A HIP OR VALLEY.PV ARRAY CAN GO TO THE CENTER OF THE HIP OR VALLEY IF THE HIP OR VALLEY IS OF EQUAL LENGTH ON ADJACENT FACES AND NO MODULES ARE ON THE ADJACENT FACE.
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CROSS GABLE WITH HIP & VALLEY ROOF
SCALE:

INDICATE ON THE PLAN FIRE ACCESS
POINT PER (CFC 605.11.3.2.1)

COMPANY LOGO	
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DRAWN BY:	
PROJECT NO.	
DATE:	
SHEET	
PV-4	